

July 24, 2003

To The Commission:

Regarding Notice of Inquiry ET Docket 03-104 concerning regulation of Broadband Over Power Line (BPL), I wish to make the following comments:

1. It is disturbing to perceive a tone in this Inquiry favoring regulatory leniency towards BPL implementation as if deployment of this technology in the US were *fait accompli*. As politically expedient and well intentioned as it may be to offer universal broadband data access to homes and businesses over power line, there are potentially overriding negative consequences of this technology to licensed radio services which must not be ignored. BPL systems under development and in field trials are known to radiate energy in the spectrum between 1.7 MHz and 80 MHz. Until the impact to licensed services in this spectrum is studied and assessed technically, arbitrary regulatory streamlining to support BPL deployment on the one hand, and the protection of licensed radio services from harmful interference on the other, appear to be mutually exclusive objectives of the FCC. As a point of reference, the Japanese Ministry of Public Management, Home Affairs, Posts and Telecommunications (MPHPT) concluded last year that it is not suitable to allow PLC between 2 MHz and 30 MHz due to hazardous effects on HF (high frequency) users.
2. As an FCC licensed amateur radio operator (WØZW) I actively operate on amateur allocations in the HF, VHF, and UHF spectrum. As provided in Part 97.1 of the FCC regulations governing the Amateur Radio Service, I offer value to the public "...as a noncommercial communications service, particularly with respect to providing emergency communications." I regularly participate in emergency communications exercises conducted on HF and VHF frequencies and am prepared to provide volunteer communications services to support relief and government agencies in times of disasters or national emergencies. I am concerned that my ability to provide this service will be significantly compromised if BPL is permitted to be deployed without protecting the amateur radio HF spectrum from harmful interference. Amateur radio stations routinely utilize sensitive receivers in order to operate "weak signal" mode. I believe this mode will be appreciably degraded if the radio noise floor is increased due to the proliferation of BPL. Furthermore, this degradation will not be limited to a local phenomenon but rather is predicted to be widespread due to the sky wave propagation characteristics of HF. The effect has been modeled by the American Radio Relay League (ARRL) and it predicts potential interference hundreds of miles from a BPL source, in addition to the local effects.
3. As opposed to loosening or streamlining regulations to promote BPL, I submit that tightening the rules governing the permitted emissions of intentional radiators is called for instead. Compared to European Electromagnetic Compatibility (EMC) limits currently under discussion, FCC Part 15 can be regarded as highly generous toward high-speed BPL. Harmonizing current US emission levels with those of European standards would likely result in a significant reduction of US permitted emissions. The absolute emission limit currently in effect by Part 15.209 (below 30 MHz, intentional emitters are limited to a peak field strength of 30 microvolts/meter at a distance of 30 meters) is clearly not low enough to insure the Amateur Radio Service protection from interference. Consider that the current Part 15 absolute legal limit would result in a very strong signal indeed to a nearby Amateur radio installation (338 microvolt signal into a 50 Ohm system) operating at 3.5 MHz. FCC regulations must protect the Amateur Service from this predicted interference.

In conclusion, I urge the FCC to not rush to judgment in favor of promoting BPL at the expense of unintended, yet irreparable, damage to valuable licensed services in the HF spectrum caused by harmful RF interference.

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